DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-009733 Address: 333 Burma Road **Date Inspected:** 29-Sep-2009

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Xu Yumin **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG Segments**

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 1AAW/1AW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW1-010. The welder is identified as #068764 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-345-SMAW-1G (1F)-repair-1 for CWR774 UT repair at Y locations 540mm, 585mm, 560mm from the cross beam side Edge Plate.

Segment 5BE/5CE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBE5-009, OBE5A-008. The welder is identified as #220067 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-TC-U4b-FCM-1.

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Segment 5BW/5CW

This QA Inspector observed the removal of the Deck Plate segment CJP splice in progress by arc gouging.

Segment 2AE/2BE

This QA Inspector observed ABF personnel performing Ultrasonic Testing (UT) of the Deck Plate segment CJP splice.

Segment 1AW/1BW

This QA Inspector observed ZPMC personnel performing UT on repaired area of the Side Plate segment CJP splice at Y location 3230mm from the Bottom Plate, counter weight side.

ZPMC Quality Control (QC) Inspector is identified as Wang Li Yang and Feng Ya Jun. QA Inspector observed QC Inspector verify welding parameters. The welding variables recorded by QC appeared to comply with the Applicable WPS.

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested by ZPMC MT personnel. The following items were tested:

Document number: 004315

1AE:

SEG004-043 continuity plate

1AAE:

Base metal check after removal of stiffener plate

Plate 1472D

Plate X193A

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

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Inspected By:	Hernandez, Dan	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer